INDEX.

Acidity of fuel-oil, 197.
Air as atomising agent, 205, 209, 252.
—— excess in furnaces, 213, 217, 221, 252.
—— forced draught, 218.
—— preheating, 211, 221.
Alaska, recent formation of oil, 32.
Alcohol blend with cracked spirit, 115.
Alkyl sulphides, 232, 244.
Analyses of Fuel-oil, 197, 199.
—— Norfolk oilshale, 22.
——, —— shale oil, 24.
Anfilogoff, N. A., on sulphur in fuel-oil, 219, 243, 248.
Anticlines of S.E. England, 163.
Aromatic hydrocarbons in crude petroleum, 287.
—— in shale-oil, 29, 33.
—— pyrogenesis of, 36.
Assam, Petroleum Industry, 263.
Atomisers for fuel-oil, 201, 207.
Atomising agents, 205, 209, 252.

Barringer, H., on oil-fuel combustion, 218.
Benzene, 38, 287.
Bibliography of Pyrogenesis of Hydrocarbons, 91.
Blackler, M. B., on pyrogenesis of hydrocarbons, 113.
—— on desulphurisation of oils, 249.
Booth, W. H., on oil-fuel combustion, 223.
Boulton, Prof. W. S., Address at British Association criticised, 1.
Bowrey, S. E. The Estimation of Toluene in Crude Petroleum, 287, 319, 321.
Brame, Prof. J. S. S., Liquid Fuel and its Combustion, 194, 225.
—— on toluene estimation, 306.
Brickwork in furnaces, 213, 225.
Burton cracking plant, 61
Bush, H. J., on submerged oil burners, 224.
Butterfield, J. C., obituary notice, no. 11, p. viii.
Butterfield, W. J. A., on sulphur in shale-oil, 33.
—— on pyrogenesis of hydrocarbons, 118.
—— on aerial *v.* ground railways in oil fields, 281.

Cadman, Prof. J., on British oil-shales, 27.
—— on geological mapping, 144.
—— on liquid fuel, 216.
Cadman, Prof. J., on the Presidential Address, 261.
—— on adjustment of drilling system to local conditions, 280.
Calder, W., Mexican Oilfields, 35.
Caledonian axes, 163.
Calorific values of fuel oils, 196, 199.
Carboniferous petroleum, 159, 178, 181, 183.
Carter, A., on drilling and fuel in Assam oilfields, 284.
Catalysts in pyrogenesis of hydrocarbons, 46, 81, 118.
Chambers, Capt. D. McDonald, obituary notice, no. 11, p. viii.
Charnian axes, 161, 171, 193.
Classification, use and abuse of, 191.
Coal, pulverised, as fuel, 223, 225, 226.
Coal-tar oils, 198.
Cooper-Key, Major A. Fire-extinction, no. 11, p. ix.
Co-ordination of Energies, 121, 259.
Correlation by petrography, 148, 150.
Cracked oils, constituents of, 87.
Cracking, discovery of, 38.
Cracking, see Pyrogenesis.
Craig, E. H. C., on oil-shale, 29.
—— on pyrogenesis of hydrocarbons, 120.
—— on geological mapping, 149.
—— on petroleum in England, 186.
—— on chemical criteria as to origin of petroleum, 248.
—— on difference between petroleum and shale-oil, 249.
—— on mineral discovery by animals, 279.
Cumberland, oil occurrence, 154.

Dalton, W. H. Science and Petroleum, 1.
—— Co-ordination of Energies, 121.
—— estimation of distances, 145.
—— Kelham boring, 189.
—— petroleum in England, 190.
—— Good servant, bad master, 191.
—— Mineral Rights, 255.
—— on salt licks (pungs) in Assam, 279.
Derbyshire oil occurrences, 8, 154, 156, 178.
Desulphurisation of shale-oil, 25, 27, 29, 33, 233, 242, 245, 304.
Devon, oil occurrence, 154.
Dienes, 116, 120.
Diolefines in cracked spirit, 89, 114, 120.
Dorsetshire oil-shale, 7.
Duckham, A., on toluene estimation, 305.

DUCKHAM, A., proposes prizes for papers, 305.
DUNSTAN, A. E., on shale-oils, 28.
—— The Pyrogenesis of Hydrocarbons, 36, 120.
—— on toluene estimation, 312.

Eastern Palæozoic Plateau, 173
Edeleanu process, 237, 247
Electricity-production by oil-fuel, 215, 223.
English oil-shales, 3.
—— petroleum, 152.
—— tectonics, 159.
Erythrene, 83.
Essex oil shale, 11.

Fire-extinction, no. 11, p. ix.
Flash-point of fuel-oil, 196.
Foamite fire extinction, no. 11, p. x.
FORBES-LESLIE, W. Norfolk Oil-shales, 3, 33.
—— Petroleum in England, 152, 189.
FORD, T., on the Kelham boring, 187.
Forest, geological mapping in, 137, 147, 150.
Free oil in oil-shales, 18, 23, 28, 30, 180, 189.
Fuel-oil, acidity of, 197.
——, calorific values, 196.
——, flash-point, 196.
—— official specifications, 196, 219.
—— viscosity of, 196.
—— water in, 196, 220.
Furnaces for oil burning, 211, 225.

Gas, periodicity of outbursts, 35.
Geological Mapping, 123.
Geology shown by surface-contour, 140, 150.
Gloucestershire oil occurrence, 155.
GREENWAY, C. Presidential Address, 257.
—— on the Assam oilfields, 276, 282.
—— on toluene estimation, 306.
"Gum" in "cracked" spirit, 89, 114, 116, 120.

HENDERSON, Dr. J. A. L., on oil-shale, 31.
—— on petroleum in England, 188.
—— on oil-fired locomotives, 220.
HOLIDAY, F. A., obituary notice, no. 9, p. ix.
Hydrocarbons, Pyrogenesis of, 36.
——, aromatic, in shale-oil, 29, 33.
—— —— estimation in crude oil, 287.

ILLING, V. C., on geological mapping, 145.
Imperial College of Science and Technology—Students in War-work, no. 11, p. x.
Industrial heating with oil fuel, 222.
Isochores, 147, 192.
Isopachytes, 147.

JACK, H. S. M. The Development of the Petroleum Industry in Assam, 263, 281, 286.
JAMES, S. L., on Geological Mapping, 123.

Kelham, Notts, oil discovery, 154, 156, 178, 181, 183, 185, 187, 189.
Kent oilshale, 11.
Kerogen, modes of occurrence, 20.
Kimmeridge Clay, 3, 179.

Lancashire oil-occurrences, 154, 178.
LEWER, R. R., obituary notice, no. 9, p. viii.
Lincolnshire oil-occurrences, 155, 157, 179.
Liquid Fuel, 5, 194.
Literature of petroleum, 1.
Locomotives, oil-fuel in, 216, 220.
LOMAX, E. L. The Pyrogenesis of Hydrocarbons, 36.
—— on sulphur in petroleum, 245.
London Palæozoic platform, 172.
LUCAS, A. D., on pyrogenesis of hydrocarbons, 117.
Lucas oil-cracking plant, 50.

MACDOUGALL, A., on Government aid in oilfield development, 280.
MANFIELD, W. H., on oil-shale, 31.
—— on free oil in Norfolk, 189.
Mapping, geological, 123.
Mathematics and Nature's "vagaries" 192.
MAY, H., on geologically inaccurate well logs, 285.
Mercaptans, 239, 244, 247.
Mesozoic rocks, thickness, 182.
Metallurgy, oil-fuel in, 222, 224.
Methane production, 120.
Mexican Oilfields, 35.
MITCHELL, H. V., on Rumanian oils, 312.
Mud-flush drilling, 284, 286.

Naphthalene reduces viscosity of fuel oil, 208.
New Brunswick oil-shale, 32.
Nitration of hydrocarbons, 288.
Nobel oil-combustion system, 199.
Norfolk oil-occurrences, 157, 180.
—— Oil-shales, 3.
North Sea floor contour, 161.
Notts oil occurrences, 154, 156, 178, 181, 183, 185, 187, 189.

Ockenden, M. A., on drilling in Assam oilfields, 283.
Oil-combustion, 194.
—— systems, 199.
Oil in recent shell-beds, 32.
Oil-occurrences, Cumberland, 154.
—— Derbyshire, 8, 154, 156, 178.
—— Devonshire, 154.
—— Gloucestershire, 155.
—— Lancashire, 154.
—— Lincolnshire, 155, 157, 179.
—— Norfolk, 157, 180.
—— Nottinghamshire, 154, 156, 178, 181, 183, 185.
—— Shropshire, 155, 185.
—— Somersetshire, 155, 184.
—— Staffordshire, 155.
—— Wales, 154, 178, 185.
—— Yorkshire, 154, 180.
Oil-reserves, 4.
Oil-shales, British, 3, 256.
—— History of utilisation, 8.
—— free oil in, 18, 23, 28, 30, 180, 189.

Palæontology, use and abuse of, 191.
Paraffin wax, Assam, 273, 280.
Patents: Cracking Oils, 94.
Pennine axis, 161.
Perkin, F. M., on pyrogenesis of hydrocarbons, 115.
—— on sulphurous oil-fuel, 221.
—— Sulphur in Petroleum Oils, 226, 250, 254.
—— on paraffin wax of Assam, 280.
—— on toluene estimation, 310.
Petrographic correlation, 148, 150.
Petroleum, Science of, 1.
Pitchford, Salop, tar spring, 155, 185.
Pungs (salt licks), 268, 279.
Pyrogenesis of Hydrocarbons, 36.

Redwood, Sir Boverton, on Norfolk oil-shales, 27.
—— on pyrogenesis of hydrocarbons, 113.
—— on geological mapping, 143.
—— on petroleum in England, 184.
—— on fuel-oil combustion, 217.
—— on desulphurising oil, 242.
—— on the Presidential Address, 261.
—— on the Assam Oilfields, 278.
Redwood-Dewar cracking process, 42.
Riddings, Derbyshire, oil-flow, 8, 154, 156, 178.
Rittman cracking process, 66, 115, 119, 321.

Saltwater in fuel oil, 220.
Scotch oilshale, 8.
Secondary rocks, thickness, 182.
Settling-tanks in oil-burning ships, 206, 219, 226.
Shale-oil, sulphur in, 24, 33.
—— desulphurisation of, 25, 27, 29, 33, 233, 242, 245, 304.
Shepton Mallet, Somersetshire, oil-flow, 155, 184.
Shropshire oil-occurrences, 155, 185.
Smith, J., on sulphur in fuel oil, 251.
Somersetshire oil occurrence, 155, 184.
Stackard, S. F., on oil-fuel combustion, 222.
Staffordshire oil-occurrence, 155.
Stratum-contouring, 146.
Submerged oilburner, 224.
Sulphonation of hydrocarbons, 288.
Sulphur as criterion of origin of oil, 228, 248.
—— detention in coal-ash, 33, 219.
—— dioxide (liquid), selective action on aromatic hydrocarbons, 296.
—— in oil-fuel, 219, 221, 234, 251.
—— in Petroleum, 227.
—— in shale-oil, 24, 33, 230, 239, 249.
Surface-contour indicative of geological structure, 140, 150.
Sussex oil-shale, 11.
Sutherland, D. A., on oil-burning in metallurgy, 224.
Swinburne, J., on desulphurisation of oil, 253

Technologists on commercial Boards, 259.
Tectonic structure of S.E. England, 159.
Temperature in pyrogenesis, 75.
Tertiary movements in E. Anglia, 164, 177.
Test-drilling, dry, 35.
Thermo-chemistry of pyrogenesis, 72.
Thiophane and thiophene, 231, 244.
Thole, Dr. F. B. The Pyrogenesis of Hydrocarbons, 36.
—— on desulphurisation of oils, 246.
—— on toluene estimation, 318.
Trienes, 116, 120.

"Vagaries" of Nature, 192.
Viscosity of fuel-oil, 196.
—— reduced by heating, 207.
—— —— by added naphthalene, 208

Wales occurrences of oil, 154, 178, 185.
Wallace, C. W., obituary, no. 9. p. ix.
Water in fuel-oil, 196, 206, 219.
Wells, J., on Norfolk shale-oil, 34.
Wharfe axis, 166.

Yorkshire oil occurrences, 154, 180.